

Setting method of shape, working stress and using environment of steel member

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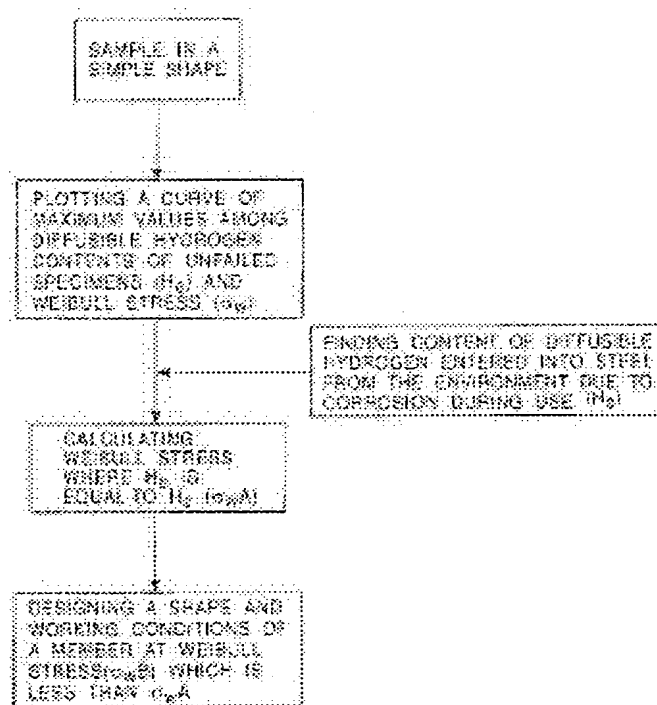
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 Abstract of correspondent: **EP 1184657 (A2)**

A delayed fracture in high strength steel is effectively prevented by appropriately setting a shape and working stress, and working environment of a high strength member having more than 1,000 Mpa of tensile strength. To this end, the relationship between a maximum value of diffusible hydrogen contents (H_c) of unfailed specimens and Weibull stress ($\sigma_w A$) are found and the content (H_e) of diffusible hydrogen entering the steel from the environment due to corrosion during the use of the steel member is also found. Then, the value of Weibull stress for the hydrogen content H_c that is equal to the environmental value H_e is found, thus determining the shape and working stress of the steel member so as to provide stress ($\sigma_w B$) below the Weibull stress ($\sigma_w A$).

FIG. 1



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